

# ROBERT BAKER: THE FIRST DOCTOR IN THE FACTORY DEPARTMENT PART 1. 1803-1858

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'We have to announce the death of Mr. Robert Baker, C.B., formerly one of the chief inspectors of factories, in his 77th year. Mr. Baker began life as a member of the medical profession, and devoted great attention to the condition of factory operatives. In 1834 he was appointed sub-inspector of factories under the Factory Act and in 1858 was made one of the chief inspectors. On his retirement he was created C.B. of the Civil Division.' (*The Times*, February 10, 1880)

The story of Robert Baker's work in the Factory Department starts at a time when 'the health of the worker' referred to the possibility of outbreaks of infectious disease and to the prolonged employment of children. As the story progresses, early attempts to control the hazards of industrial disease are seen, and the questions of the duties of the doctor in industry and of the organization of the medical supervision of small workplaces receive attention. From the successes and failures of a doctor, well placed to view these ever-present problems, we may be guided in our current attempts to deal with them.

## Medical Training

Robert Baker's early career is curiously similar to that of Thackrah. They were both the sons of Yorkshire druggists. Baker was born, eight years after Thackrah, on August 15, 1803, the second son of John and Hannah Baker of High Ousegate, York.<sup>1</sup> In March 1818 he was apprenticed to Mr. (later Sir) William Pearson for a period of five years—14½ years was not unduly young for starting an apprenticeship in those days.<sup>2</sup> Pearson was surgeon to the Hull General Infirmary, now the Hull Royal Infirmary.<sup>3</sup> Baker followed Thackrah to Guy's Hospital in London to continue his studies; he took the examination of the Society of Apothecaries in 1823.<sup>4</sup> This is of interest, for it will be remembered that Thackrah, when he was 20 years old, 'was not admitted to examination being under the proper age'.<sup>5</sup> How then did Baker manage it? A clue lies in the record of Qualifications of Candidates of the Society of Apothecaries where, under May 1, 1823 (when he would have been only 19 years old), Baker's date of baptism is given as August 19, 1801.

Certainly Robert Baker had been baptized at All Saints, York, on August 19, but in 1803, not 1801. Was there some clerical error or was there a de-

liberate move to satisfy the conditions of entry to the examination? For the Apothecaries Act of 1815,<sup>6</sup> a part of which is still in force, requires candidates to have reached the age of 21 years. A change to 1802 would not have made him old enough, but 1801 implied that he had by now passed his twenty-first birthday and could be admitted. Whatever lay behind it, he managed to qualify when only 19 years old. He went on to obtain the M.R.C.S., the name of Robert Baker of Hull appearing on the Royal College of Surgeons' Registers from 1828 to 1843, after which it disappeared. Perhaps by then he ceased to regard himself as a practising surgeon.

## Practice of Medicine

Again the comparison with Thackrah is striking. Having finished at Guy's Baker went to Leeds to start practice and soon became a town surgeon, an office he described as 'an ordeal all the medical men of the town go through as the high road to better practice'.<sup>7</sup> Whereas Thackrah from this appointment appears to have developed an interest in the medical conditions resulting from the occupations of his patients, Baker was deeply moved by the

social conditions of the poor. In 1827, just as Thackrah was in conflict with the senior members of the medical profession attached to the visiting staff of the Royal Infirmary at Leeds,<sup>8</sup> so was Robert Baker, though he was only 24 years old. In his *Remarks on the Abuses in the Infirmary at Leeds* he argued that more surgeons were required and that medical practitioners should be allowed into the operating theatre,<sup>9</sup> and he remarked on the illiberality of professional feeling in the town, adding that wherever talent was exhibited the world admired it, but it was not necessarily hereditary.<sup>10</sup>

In 1831-32 there was a serious cholera outbreak in the north-east. After a visit to Tyneside, Thackrah wrote *Cholera, its Character and Treatment. With remarks on the Identity of Indian and English; and a particular reference to the Disease, as now existing at Newcastle*. Baker also went there but the difference in approach is apparent. He studied the modes of propagation of the scourge and the causes leading to its production, preparing for the Leeds Board of Health in 1833 a 'cholera plan' showing the distribution of cholera cases and emphasizing the prevalence of the disease near open sewers and becks.<sup>11</sup> This report in 1833, and another<sup>12</sup> in 1839 with which Baker was closely associated (he was a member of the town council and chairman of the streets committee), on 'the state of the town of Leeds, the size and condition of the houses, overcrowding, etc.' were described many years later by the chairman of a Royal Sanitary Commission<sup>13</sup> as 'greatly in advance of what had been done up to that time in such matters'.

But the cholera outbreak had a more significant effect on Baker's career, as he explained many years later. 'I left the medical profession for factory work because in 1832, when cholera came to Leeds, I was the parish surgeon and went to see it in Sunderland. After attending many cases I took the disease and it so unnerved me that I gave up my profession and followed factory work, being greatly interested in it'.<sup>14</sup> What do we know of this interest in factory work? Giving evidence before the Factory Inquiry Commission in 1833,<sup>15</sup> Robert Baker remarked, 'I have attended the infirmary of Hull and the infirmary of Newcastle, for three years and upwards, and have besides been attached to the collieries and lead works near the latter town'. Coming nearer home, at Leeds, 'Fourteen months ago I was appointed by Messrs. Hinds & Derham surgeon to their mill, and have had two other appointments of the same nature since that time, one at Mr. Holforth's and the other at Mr. Wilkinson's'. The circumstances of his appointment to Hinds & Derham are of some interest and were described graphically by Baker himself years afterwards. 'Mr. Robert Derham, a

considerable worsted spinner in 1830\* complained to me, then practising my profession, of what he called the "hard sayings of the public on account of the number of cripples that were made by manufacturers working little children long hours, and often night and day", and asking a remedy. I suggested to him the propriety of placing a medical man over his establishment, with unlimited power to enter his mill by night or by day, when at work, for the purpose of watching the effect of labour on the constitution of each young worker, and with power to discharge any hand materially suffering from the employment or to put the children to half-a-day's work, and to send them to school the other half'. The educational part of the scheme was not carried out, although shortly afterwards Messrs. Marshall, the biggest flax spinners in Leeds, adopted the idea. Baker claimed *inter alia* that 'I believe I am entitled to the original idea of half time work and school in combination and I hope I shall be forgiven the egotism of claiming it'. Not that the appointment of a factory doctor was an isolated occurrence in Leeds at that time. Perhaps the biggest flax spinners in the town were Marshall's, and even in the 1820's John Marshall began to realize that the mills were more than a machine to be driven efficiently without too much regard for the workers who passed the long days of their short lives in its throbbing atmosphere.<sup>21</sup> After attention had been drawn in 1832 to the alleged physical strain in the mills, Marshall's engaged a surgeon to attend twice weekly.<sup>22</sup> He was Mr. W. Price, who was 'employed to inspect the condition, as to the health, of all persons in our works, attending twice a week, to examine and prescribe for any of the workpeople, who either apply to him voluntarily or are sent by the overlookers, or observed by himself in going through the works (*sic*). Each week he goes through a fourth part of the mill to examine the hands when at work'.<sup>23</sup>

With practice like this, Thackrah's classic just published, and Baker's interests developing, it is fair to suggest that, if Thackrah is considered the father

\*Factory Inspector's Report for period ending December 31, 1866, p. 91. Robert Baker varies when giving the date of starting with Derham's, although the account remains substantially the same. To a meeting of the National Association for the Promotion of Social Sciences<sup>16</sup> in 1859 he gave the year as 1828, adding 'if I found their employment prejudicial to the children, to put them on half time or discharge them altogether. This was the origin of the half-time system'. Before the Royal Sanitary Commission<sup>17</sup> of 1871 he repeated the date as 1828, but before the 1876 Commission enquiring into the working of the Factory and Workshops Acts<sup>18</sup> the year he gave was 1830. Perhaps the most reliable evidence, as it was given nearer the time, was to the Factory Inquiry Commission<sup>19</sup> of 1833; giving evidence in May of that year, Baker said that he had been appointed by Hinds & Derham 14 months previously. Finally the account he gave in the Factory Inspector's Report<sup>20</sup> in 1873, incidentally again giving 1832 as the year of starting, concludes, 'This duty I performed for three or four years. Other manufacturers soon followed his (Derham's) example and in a few weeks I had forty of the largest mills in Leeds and the neighbourhood under my care'.

of industrial medicine in this country, then Leeds was the cradle. But poignantly, Thackrah the clinician died at the very time the Factory Inquiry Commission was in Leeds,<sup>24</sup> and it was Baker, with his interest in preventive medicine, who was to continue for a further 45 years. Did they ever meet? I have found no record of this; in any event it is quite possible that none would exist. Two doctors working in the same town are not likely to leave records of their meetings to posterity. It may be significant that Baker refers to Thackrah's published work<sup>25</sup> but not to his expressed view or opinions.

### Factory Department Superintendent

The history of the development of factory legislation, which forms the background to the remainder of Baker's life, is well known. It has been well documented by Djang,<sup>26</sup> Hutchins and Harrison,<sup>27</sup> and Thomas.<sup>28</sup>

The Factory Act of 1833 provided an opening for Robert Baker. Under Section 19 of that Act the inspectors could appoint superintendents to assist in carrying out the Act. Mr. Rickards, a former East India merchant,<sup>29</sup> was assigned to Yorkshire, Lancashire, Cheshire, north-west Derbyshire, and north Staffordshire, as well as a part of North Wales. As early as April 1834<sup>30</sup> Rickards was suggesting that 'the appointment of certifying surgeons, under the central direction of the Inspector, might be rendered useful hereafter, not only as a substitute for wardens, but in attending to the healthiness and cleanliness of the mills'. It is not surprising to learn that Baker joined such a man, being appointed superintendent on October 22, 1834.

Sections 11 and 12 of the Act required that no child under 11 years of age was to be employed without a certificate stating that he was of the ordinary strength and appearance of a child aged 9 years. The certificate was to be issued in the first instance by a local physician or surgeon.

These requirements raised two problems of administration that were of interest to medical men. First was the definition of persons competent to act in this capacity, and second the establishment among them of some degree of uniformity in agreeing the ordinary strength and appearance of a child aged 9 years.

As Thomas has so delicately put it,<sup>31</sup> 'the medical profession was not yet clearly de-limited, and upon the fringes there practised many men whose technical knowledge and skill were of the slenderest'. It is not surprising that two inspectors, Rickards and Horner, tried to limit the granting of certificates to surgeons whom they could trust. In 1836 Rickards retired owing to ill health, and Horner took over his

district, continuing the system of appointing surgeons to issue certificates.

Another approach was to limit the choice of surgeons available to an employer, a problem discussed fully by Mr. Saunders in his report of October 1838.<sup>32</sup> He pointed out that there were 13 surgeons signing certificates in Leeds although three would have been sufficient. He tried to persuade the surgeons and mill occupiers of Leeds to reduce the number of certifying surgeons, but without success. We have no evidence of Baker's attitude to this, but, from what can be gathered of his personality by reading his reports and papers, it is more than likely that he favoured a reduction in numbers.

In such an atmosphere it is not surprising that Robert Baker, who had issued certificates as a surgeon before his appointment—'I used to give such certificates in large numbers at my own house every Saturday night',<sup>33</sup> continued to do so as a superintendent. At least, it could be argued that he knew the quality of the medical man issuing them. At this early stage in the development of the inspectorate, public and private duties were not as clearly separated as they are now. His activities in issuing certificates led to the Manchester Short-Time Committee<sup>34</sup> (in an undated memorandum, probably late 1836 or early 1837) objecting to the practice by which 'Superintendents of factories who happen to be medical practitioners derive extra emolument by entering into private agreements and compacts with particular mill owners to act as certifying and visiting surgeons'. They went on to add, 'and that unless this principle is strictly acted upon, it is not unreasonable to expect that the superintendents will not occasionally act with a leaning to particular parties with whom they have a pecuniary connexion, and who may be more or less liberal, according as they are trusted with more or less favour and indulgence. To put the same individual in the office of superintendent of factories and in that of certifying and visiting surgeon is to give him an interest directly at variance with his duty. . . .' This contention, that the inspector must be quite free from local pressure, was to be re-echoed, curiously enough, by Robert Baker 30 years later when he objected to the principle of local authority officers enforcing the 'factory regulations' for small factories with fewer than 50 persons.<sup>35</sup> 'As many local authorities contain amongst their number the very persons whose works would be subject to his supervision . . . he would never act sufficiently independently of them without fear of losing his office'.

Leonard Horner replied to the Manchester Short-Time Committee in February 1837 in a characteristically forthright letter.<sup>36</sup> He pointed out that he had only one medical man who was a superintendent,

and that he had already written to Baker in July 1836. 'I was not aware that you granted certificates of age. As it may give rise to suspicion of partiality . . . I must beg that you grant no more'. He went on to say that Baker had replied that he had done it previously with the concurrence of Rickards. 'But being still dissatisfied with the arrangement I again expressed a strong opinion on the subject last December to Mr. Baker, and in a letter dated 4th January last, he informed me that he should cease from that time to grant certificates of age'. Confirmation of this came a few months later when Horner reported on the rates of charges made by the surgeons in his district.<sup>37</sup> Although Baker was listed among them, there is a blank opposite his name and a marginal note, 'I do not now issue certificates: when I did the masters paid me and never the children, except during the first few months of the Factory Act coming into operation'. The apportionment of charges reflects Baker's views on the social scene.

The second problem of administration arose from Section 11 of the Act, which required that no child was to be employed in cotton, woollen, worsted, hemp, flax, tow, linen or silk mills unless he produced a certificate stating that *he was of the ordinary strength and appearance* of a child aged 9 years. It has already been noted that the probity of some of the surgeons issuing the certificates was open to question, and the magistrates who had to countersign the certificates were sometimes little better themselves. The inspectors were anxious to establish criteria which would allow a minimum of discretion to the certifying surgeons, so making for uniformity and a greater degree of precision.<sup>38</sup> One suggestion was that height could be used as a criterion, and Horner, in a supplementary letter of instruction to surgeons in September 1836, referred to the value of figures collected by Mr. Baker.<sup>39</sup> Another method appears to have developed from the work of E. Saunders on the value of examination of the teeth as a test of age.<sup>40</sup> The factory inspector, Robert Saunders, referred to this idea, and comments that Mr. Baker had previously acted on it, but not to any great extent or with considerable confidence.<sup>41</sup>

Beckwith<sup>42</sup> states that Baker was responsible for accusing a fellow surgeon of issuing a false certificate. This may be the case of Dr. Smith at Ossett, which was referred to by Saunders in his report of October 1838 and mentioned by him to the Select Committee inquiring into the operation of the Factories Act.<sup>43</sup> Ossett was in the district of Mr. Superintendent Bates.<sup>44</sup> Saunders was in difficulty because, although himself persuaded that Dr. Smith was certifying children who were under age, a magistrate was countersigning the certificates. And these 'valid'

certificates were produced as defence by the employer, who was accused of employing children under age. It is noted by Saunders in this part of his report that Baker was assisting Mr. Bates in this inspection.

At the same time Baker continued to pursue his official duties with vigour, sometimes in the face of strong opposition. He reported to Horner,<sup>45</sup> 'At Dewsbury (where the case was tried) there are two magistrates who have always evinced a very great unwillingness to inflict severe penalties on any mill-owners violating the Act. You may form some opinion of their feeling when I tell you that, on the first occasion of my taking a case before them, before I had even opened the case at all, one of them stated in open court that, "this was the worst Act he ever knew; that he never would convict under it except in the smallest penalty, and then only when he could not help it"'. In the same report Mr. Horner was able to quote one of Baker's successes: 'A mill owner who had been setting the Act at defiance in almost every particular, and against whom Mr. Baker accordingly laid 10 informations, was convicted by the Magistrates at Halifax in the full penalty of £20 for each offence; and this fine of £200 has had, I am informed, the most salutary effect in that neighbourhood and in many other parts of my district which the report has reached'. Several years later Mr. Saunders, in the last report before his death, alludes to a difficult and important case concerning guarding of machines, which Robert Baker had conducted before the Leeds magistrates.<sup>46</sup> An account of this, by Baker himself, appeared in 1856.<sup>47</sup> 'In 1851, I was continuing to issue the notices (concerning dangerous machinery) on all mill occupiers, when I was stopped by a decision of the Leeds Bench, which, in determining upon a prosecution for an accident to a young woman, whose hand had been seriously injured by machinery neglected to be fenced, after the notice had been given under Section 43, said, that unless I was prepared to prove that the machine by which the young woman had been injured, however similar it might be to other machinery of the same kind, was really in the room at the time the notice was given, the notice would not operate against the defendant.' Mr. Redgrave, who was the inspector in 1856 when Baker's account appeared, commented that, since the date in 1851 when Baker's case was dismissed, no further legal proceedings had been taken when accidents were caused by machinery declared to be dangerous.

While some of Baker's struggles in court have been described, his compassion is illustrated by two cases in which he prosecuted in August 1836.<sup>48</sup> William Horsfall was charged with 'Procuring a false certificate by substituting an older boy for a younger to

get a certificate for the latter for full time'. The report notes that he was 'committed for a month, but begged off at the rising of the court by the superintendent'. In the other case, John Hinchcliffe, an operative, was charged with employing a child more than nine hours a day and was fined ten shillings on conviction. The appropriation of the penalty, which apparently was decided by the superintendent, was 'Half to the Provident School, Leeds, the other half to a boy who had been beaten by this man while working for him'.

The Factory Act of 1833 included provision for the education of children and required that a voucher of attendance be given weekly by the schoolmaster. Like his colleagues, Baker was enthusiastic over this and in 1839 was keen to advocate a national system of education.<sup>49</sup> He graphically described the difficulties of implementing the provisions of the Act and in one, by now well-known, example illustrated what he called 'the miserable incapacity of some teachers': 'this to certify that 1838 Thomas Cordingley as attend martha inseps school tow hours per day January 6'. He adds point by regretting that he cannot give a facsimile of the certificate.<sup>50</sup>

By 1840 the problem of accidents in factories was attracting increasing attention, and the inspectors of factories were asked to make a special report on the practicability of legislative interference (the need had been established by Ashley's Committee<sup>51</sup> of 1840) to diminish the frequency of accidents. The inspectors called for reports from their superintendents. Baker's contribution<sup>52</sup> contains little of medical interest apart from his attempt to assess the size of the problem by referring to hospital admissions. He presented the figures from Leeds General Infirmary for the year 1840 of mill accidents happening within the township of Leeds, Holbeck, and Hunslet (Table 1).

Baker commented, 'Thus it appears that in 1840 there were on the average about five accidents a week, showing a very large amount of human misfortune resulting from the want of precautionary measures with regard to the machinery at which the people are employed. How much greater the actual amount is cannot be ascertained for it must be remembered that this is a return from only one public institution, where there were several open for the reception of like accidents, independently of the private houses to which many apply'.

From various sources it is possible to form a picture of the amount of work done by a superintendent at the period. For the 10-month period of September 1, 1837 to July 1, 1838 Baker's district included 522 mills, of which nine were unoccupied. Of these he visited 108 once, 329 twice, 61 three

TABLE 1

IN-PATIENTS			
Males 23	Females 10	Total 33	
of which			
Were admitted		Years of age	
1	at	8	
2	at	9	
3	at	10	
1	at	12	
7	at	13	
5	at	14	
4	at	16	
5	at	17	
1	at	18	
4	at	21 and upwards	
Total		33	11
			1

OUT-PATIENTS			
Males 161	Females 67	Total 228	
of which			
Were admitted		Years of age	
4	at	9	
5	at	10	
12	at	11	
11	at	12	
24	at	13	
20	at	14	
17	at	15	
22	at	16	
21	at	17	
16	at	18	
11	at	19	
4	at	21 and upwards	
For injuries to the arm		17	
For injuries to the hand		39	
For injuries to the thumb		14	
For injuries to the fingers		158	
Total out-patients		228	
Total in-patients		33	
Total cases		261	

times, and 4 four times. He spent 213 days in the discharge of his duties, travelling 2,207 miles, and failed to visit only one of his occupied mills.<sup>53</sup> For this he received £350 a year. 'This includes the remuneration for the services of the superintendent, together with all the travelling, tavern and contingent expenses incurred by him, including stationery, excepted printed forms for periodical returns or registration'.<sup>54</sup> Reading this last concession by the Treasury one is tempted to reflect 'Plus ça change, plus c'est la même chose'. The accounts of the costs of court actions brought by Baker on January 7, 1837 include '10/6d for horse hire from Bradford to Keighley to enquire about the day of the meeting'<sup>55</sup> (a return journey of about 20 miles).

Baker's work as a sub-inspector continued over the years, the official papers giving only brief glimpses of his work (Fig. 1). He remarked in 1842 that he often



FIG. 1.—A print titled 'Dr. Baker's interview with the Yorkshire factory girls. See No. 16. B.W.' The original source of this is at present unknown.

had to exercise his professional knowledge and had had to turn out about 1,000 cases of infectious disease such as scald head, phthisis, scrofulous ulcers, and extreme cases of ophthalmia.<sup>56</sup> He had 'interposed' in respect of ventilation in extreme cases of variable temperature and 'offensive privies'. His work did not pass unrecognized by those closely connected with him in the district, and when there was a vacancy in 1849, caused by the death of Mr. Inspector Stuart, the magistrates of the West Riding and the borough of Leeds presented testimonials to the Home Secretary recommending Mr. Baker for the higher appointment.<sup>57</sup> The post however was filled by Capt. (later Sir John) Kincaid. Three years later another vacancy occurred with the death of Mr. Saunders. It must surely have been a disappointment to Baker when the job fell to Alexander Redgrave,\* who was to outlive Baker and become the first Chief Inspector of Factories.

It was not until June 15, 1858 that Baker was promoted to inspector, taking over Howell's division on his death (Fig. 2). Redgrave and Baker thus

became the two inspectors, each covering half of the British Isles. During the ensuing 20 years that Robert Baker filled this post there were great developments in the knowledge of occupational disease and in the organization of public health; the first 13 years of this period have been described by Brockington<sup>59</sup> as the 'brilliant interlude' in State medicine.

The part then played by Baker and his views on medicine in industry reveal an awareness of problems which are topical even at the present day. This period of his life will be considered in a subsequent paper.

#### Poor Law Migration Officer

Although this account of Baker's life is primarily concerned with his work in connexion with the administration of factory legislation, it should be viewed in the context of the social scene. The enormous and sudden increase in population, especially in the manufacturing towns, associated with the industrial revolution gave rise to difficult problems; poor relief became more acute, the public health suffered, especially in the more thickly populated parts, churchyards were overcrowded, and illiteracy was general.<sup>60</sup> It has already been seen how Robert Baker was engaged in the second and the fourth of these problems. In his zeal as a social reformer he was engaged in helping to deal with the other two.

\*Alexander Redgrave was born in 1818 and was therefore 15 years younger than Robert Baker. In February 1834 he became an Extra Clerk in the Criminal Registry Department of the Home Office and three years later transferred to become Clerk to the four factory inspectors of that time. Ten years later, in October 1847, he was appointed a sub-inspector of factories, succeeding to the post of inspector on the death of Mr. Saunders in 1852. He first published *The Factory and Workshop Act* in 1878 (it is now in the twentieth edition and widely used). He died in London on December 6, 1894.<sup>58</sup>

Although the social conditions of the workers in the northern industrial towns had aroused comment, the conditions of life of the agricultural workers in the south and east of England were no better and perhaps worse. Writing of the period 1834-37, Redford says, 'the cancer of pauperism had spread ominously over a greater part of England during the generation following the French wars. Throughout the southern and eastern counties of England the hardy peasantry of bygone times seemed to have degenerated into a stagnant mass of demoralized paupers'.<sup>61</sup> At the same time the cotton trade of Lancashire and the woollen trades of the West Riding were expanding more rapidly than any other industries. As a consequence the employers were looking out for new labour, the shortage being perhaps accentuated by the curtailment of child labour in mills under the Factory Act of 1833.<sup>62</sup>

The Poor Law Commission was aware of the

advantages resulting from the migration of labour within the country but was at first<sup>63</sup> cautious about advocating it 'where there was not a clear and specific demand for the labourers to be removed'. But within a year they appointed two Migration Agents, Mr. M. Muggeridge in Manchester and Robert Baker in Leeds. Baker in his application said that in his official capacity,<sup>64</sup> 'I have been often enquired of, by the masters, where hands can be procured—in what mode they should communicate with the Poor Law Commissioners' and that during his three years as a parish surgeon he had become 'acquainted with the condition of the working class'.

The second report of the Poor Law Commission contains reports from both Muggeridge and Baker. A comparison of their work shows that Muggeridge had by far the greater task<sup>65</sup> (Table 2).

This great difference largely reflected the industrial activity of their two areas. Muggeridge in his report

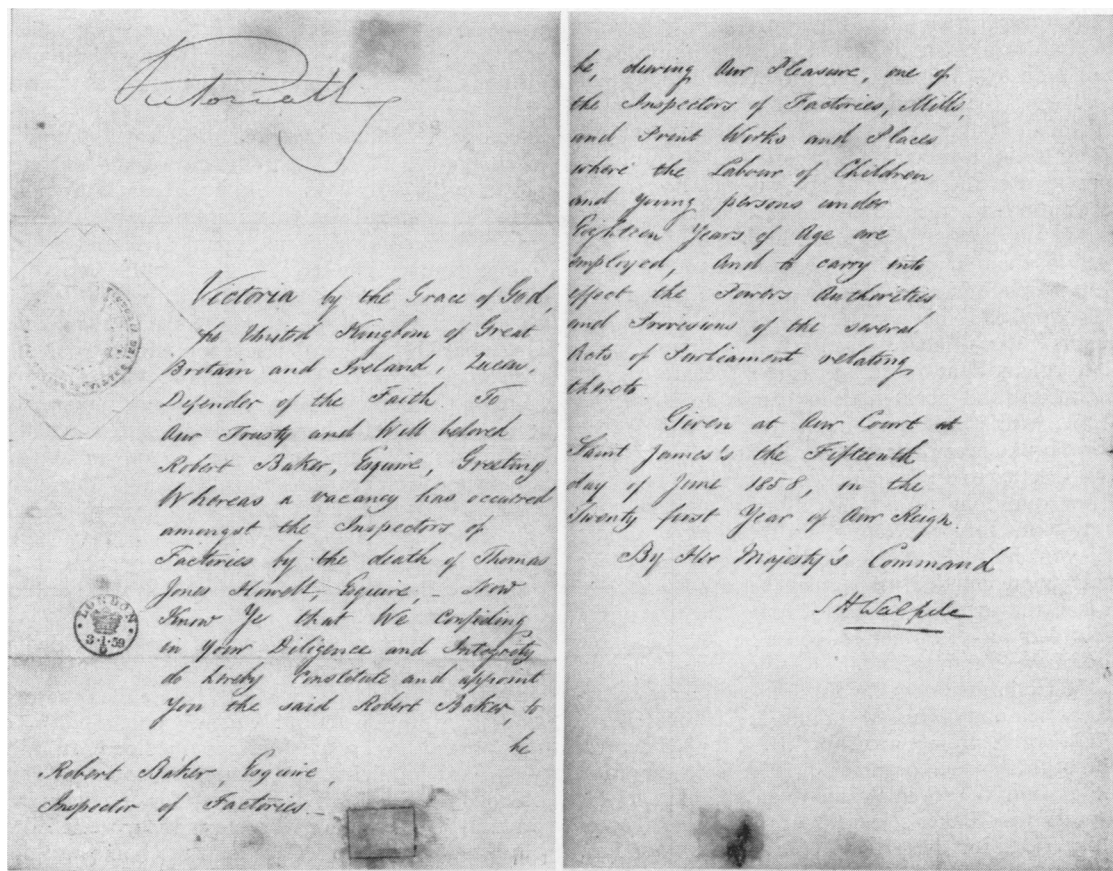


FIG. 2.—The Royal Warrant, bearing Queen Victoria's signature at the head, issued to Robert Baker on his appointment as an Inspector of Factories.



TABLE 2

Total No. of Families	Baker, Leeds Families	Muggeridge, Manchester Families
For whom offers of employment have been obtained	132	435
Who have arrived at their new location	80	329
Who are on their way down or for whom negotiations are pending	12	43
Total	92	372
Refused to migrate after offers made to them	40	63

refers to the numbers of children between the ages of 12 and 13 years working in cotton, wool, silk, and flax mills. In his area, composed of the counties of Lancashire, Cheshire, and Derbyshire, the numbers were 13,362, 3,463, and 1,281, respectively, whereas in Baker's area, the county of Yorkshire alone, only 7,904 were so employed.

It is not surprising that the importation of labour into industrial districts met strong opposition from the advocates of factory reform, even to the extent of alleging that it was responsible for introducing smallpox. Baker, whilst advocating the need for migrants to be vaccinated, reported<sup>66</sup> 'some of the opponents of the New poor law, one of whom made an exciting statement that out of a certain number of migrants forced from a southern county a great many of them had died. On enquiry into this statement it was found to be utterly without foundation'.

In April 1837 he warned the Poor Law Commissioners<sup>67</sup> that Richard Oastler had a migrant on a platform and that the antagonism of the populace to migration 'had been made a handle to rouse the people with'. A few months later, in August, the storm broke over Baker's head. Oastler, in a characteristic letter to a newspaper,<sup>68</sup> demanded, 'Now for a few questions to this Mr. Baker—this migrant agent—this tool of tyranny. In the name of God I ask you, Sir—Have you received orders to relieve these poor, deluded, trepanned, betrayed wretches, or is it true you have submitted to be "the tool of the three demons of Somerset House . . ." (the three Poor Law Commissioners). Reading Baker's letters to the Commissioners, he did not seem distressed at this attack and discussed it quite dispassionately.

The whole project was short-lived, for the depression of trade which occurred in 1837 made migration futile<sup>69</sup> and 'the scheme came to an obscure end'. It appears that Baker's job folded up before that of Muggeridge for the Third Report of the Poor Law Commission contains a report from Muggeridge but none from Baker. Confirmation comes from the estimates of expenditure. For the financial year

beginning April 1, 1837 there is an account for two Migration Agents, one at £400 and the other at £200.<sup>70</sup> But for the year beginning April 1, 1838 there is provision for only one Migration Agent at £400 and, further on, an item for 'Travelling expenses of Migration Agent and Incidental Expenses of Migration Office at Manchester, £200'.<sup>71</sup> So ended what must have been an interesting episode, although Baker never referred to it later.

### Early Publications

This article has been concerned with that period of Baker's life leading up to his appointment as inspector of factories. During this time he was responsible for a number of publications which illustrate the breadth of his interest in social welfare. His early reports on the cholera epidemic of the early 1830's and on the state of the town of Leeds have already been mentioned.

More or less as a companion to his daily work he wrote in 1854 *The Factory Acts Made Easy*, which was, as the name implies, a description of the provisions of the Factories Act in language that the employers and employees could understand.<sup>72</sup> The language of statutes taxes even an educated, but non-legal, brain. To the semi-literate worker and employer in the early days of the Acts, these latter must have been impossible. One point made by Baker in this book recurs again and again in his later pronouncements: 'The great value of the certifying surgeon's occasional walk through the mill is that he sees the effect of the labour, to which the people are subjected, on their physical condition'. From his own long experience Baker saw the doctor in industry as more than an examiner of bodies and a signer of forms. A little further on, it is suggested that the occupier should employ a surgeon on an annual arrangement on account of his being able to control the spread of infectious disease! As the years passed this reason for having a doctor in industry steadily lost its force, and yet Baker obstinately clung to it, even repeating it 25 years later with, as will be seen, unfortunate results.

In 1851 appeared 'The Present Condition of the Working Classes Generally Considered'. This was the title of two lectures delivered before the Bradford Church institution and subsequently published.<sup>73</sup> To the present-day reader this is mediocre, turgid, Victorian moralizing. He mentions a topic which is obviously one of his favourites, for it occurs repeatedly in his factory inspector's reports. It is his belief that a woman's place is in the home and not out at work: 'Our homes, our health, our comforts are perfectly dependant on the qualifications of the female character. Upon her domestic habitudes



hang the attractions which draw the husband homeward from a host of temptations which beset him from without'. Discussing the physical condition of the factory operatives he remarks on the benefits resulting from the Factories Acts, that flat foot and in-knee, once so common, are nowhere to be seen. Regarding occupational expectancy of life we find, 'Now the causes of these differences in the expectancies of life are various. . . . But one fact may be shewn in illustration, that where persons are congregated in numbers, for long together, in highly carbonized and heated atmospheres and of whom great and fixed attention and great physical labour is required, the effects upon the powers of life are as fatal as when they are destroyed by any other kind of over-stimulation'. He goes on to substantiate this suggestion by comparing the mortality of letterpress printers, mill operatives, clerks and school masters, tailors and miners 'some of whom are a particularly dissipated class' with 'bricklayers, masons and blacksmiths . . . who are for the most part careless about the wear and tear of life whether by dissipation or otherwise'. Both groups die at the same rate, we are told. To modern eyes the first group is an oddly assorted lot, and one wonders whether Baker was more concerned to impress his hearers than to examine the facts. Before a different audience he was capable of a more sophisticated analysis, as is seen in many of his factory inspector's reports and in particular his paper in the *Journal of the Royal Statistical Society* in 1858.<sup>74</sup> When he goes on to discuss the morality of factory operatives the same question arises; is he quoting established facts or impressing the Bradford Church institution? 'It has been asserted that out of an assemblage of 200

females in one factory, there were not twenty untainted by vice; and there are records of such prurient and general criminality among them, that one shudders to sully the page with their details'. Certainly he was more restrained when discussing, in the factory inspector's report a few years later, immorality among female operatives in Bolton<sup>75</sup>. (The factory inspector's reports of a century ago ranged more widely than do those of the present day.)

Baker's chapter in *Meliora or Better Times to Come*<sup>76</sup> is titled 'Words for the Working Class'. In it we see Baker drawing on his medical training to form analogies, but otherwise it contains little of interest. He made no attempt to identify himself with members of the working class and to work with them for social improvement, which is the pattern so frequently shown by social reformers of the present day. Rather, so wide was the gulf, both social and economic, between the poor and the reformers, that Baker, like many of his contemporaries, worked, both in factories and in the local council, for the benefit of the poor, at the same time exhorting them in the 'virtues' of the Victorian era and always stressing the benefits of education. As will be seen later, he was aware of many failings on the part of the workers. The problem in his eyes was more than social reform, that is reform of the system, it included reform of the worker as well. This awareness of the individual with his potentialities and failings, one likes to think, was, in part at least, the result of medical training and practice.

References to Part I and acknowledgements will appear at the end of Part II, to be published in the July issue of this Journal.